Effectiveness

Dose Response – Endpoints
- Effective Concentrations
- Health Effects
- Routes of Entry

Physical Characteristics – e.g. particle size, yield

Variables – Environmental
- Motivation

Modeling and Simulation

Routes of Entry

- Inhalation – Lower respiratory (1-5 microns)
  - Upper respiratory (1-100 microns)
- Eye effects – large and small particles, liquid
- Cutaneous – skin effects, large particles, liquid

Solvents and Propellants (examples)

Solvents

1,4 Dioxane
1,1,1,trichloroethane
Isopropyl alcohol
Methyl isobutyl ketone
Methylene Chloride
Trichloroethylene
Ethanol
Soy oil
Propylene glycol
Water

Propellants

Dymel Blend
Iso-butane
Nitrogen
Carbon dioxide

NL Modeling/Simulation

- Computer simulations predict the effects from the dispersion of NL chemical devices
- Analysis (e.g., Monte Carlo simulation) provides assessment of NL system feasibility